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Tien Wai Loh

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INTELLECTUAL PROPERTY GROUP

FREDRIKSON & BYRON, P.A.

200 SOUTH SIXTH STREET, SUITE 4000

MINNEAPOLIS, MN 55402

EXAMINER

VERDI, KIMBLEANN C

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/572,815

Applicant(s)

LOH, TIEN WAI

Examiner

KimbleAnn Verdi

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-17 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 22 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 11/16/2007
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-17 are pending in the current application.

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Information Disclosure Statement

2. The information disclosure statement filed November 16, 2007, Non-Patent Literature Documents section, items 2 and 3, fail to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the publisher, author (if any), title, relevant pages of the publication and date are missing for items 2 and 3. The website addresses provided by the applicant are no longer valid, as a result the Examiner was unable to locate the cited references. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Drawings

3. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "303" Figure 4.
5. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

6. Claims 3-4 and 10-17 are objected to because of the following informalities:
- a. Claim 3, line 3, the recitation of "the string value", should be --a string value--, claims 4 and 12 has the same deficiency as claim 3;
 - b. Claim 10, line 6, the recitation of "the second set Interfaces and the tags", should be -- the second set of Interfaces and the set of tags 6;
 - c. Claim 10, line 8, the recitation of "the set of tags is usable to invoke methods defined in the second interface", should be --the set of tags invokes methods defined in the second set of interfaces--;
 - d. Claim 13, line 8, the recitation of "the adapter provides", should be --an adapter provides--;
 - e. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. **Claims 13-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

9. Regarding claim 13, the phrase "the possibility of " renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

10. Regarding claim 16, the phrase "sufficient for" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

11. Regarding claim 13, the claim element "providing a means for adapting second programs to be invocable by the set of tags whereby the adapter provides the possibility of invoking second programs" is not being treated under 35 U.S.C. 112 sixth paragraph because the claim describes the structure supporting the adapting function (i.e. adapter), which does not meet the third prong of the 3-prong analysis.

Claim Rejections - 35 USC § 101

12. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

13. Claims 1-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

14. **Claims 1, 10, and 13** are directed to a process (method), however, the process is not limited to a particular practical application and does not pass the machine-or-transformation test since the claimed process is not tied to a particular machine or

apparatus and the claimed process does not particularly transform a particular article to a different state or thing, as such the claims are not directed to statutory subject matter.

In contrast, a process claim which explicitly recites the particular machine or apparatus, recites a step that inherently involves the use of a particular machine or apparatus, or particularly transforms a particular article to a different state or thing is therefore directed to statutory subject matter.

Appropriate correction or amendment is required.

Claims 2-9, 11-12, and 14-17 did not cure the deficiencies of claims 1, 10, and 13.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1-5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Santiago (U.S. Patent 7,096,455 B2) in view of Egli (2003/0084120 A1).

17. **As to claim 1**, Santiago teaches the invention substantially as claimed including a method for accessing and displaying dynamic content in a web page, comprising:

defining (*i.e. disclosing*) a set of Use-Patterns (*i.e. actions performed by functions*) of dynamic content in web pages (*i.e. "performing one or more functions*

on data identified by the XPath instruction, such as substituting values, iterating an expression, testing the validity of an expression or creating an instance of a DOM document", col. 5, lines 16-19, -actions disclosed are substituting values, iterating an expression, testing the validity of an expression or creating an instance of a DOM document);

defining a set of Interfaces (*i.e. "DOM document instances, 420, Figure 4", "Specifically, the DOM is a platform-independent interface allowing dynamic access to the content, structure, and style of documents", col. 3, lines 6-8*) for accessing data of diverse data sources (*i.e. "XML provides for a Document Object Model (DOM) for defining a standard way to represent diverse data sources", col. 3, lines 4-6*),

defining methods (*i.e. "XPath instructions"*) in the set of Interfaces to access data from the diverse sources of data (*i.e. "The presentation JSPs, created by the page author, access domain data or resources, represented as DOM document instances 420, using XPath instructions, col. 5, lines 55-57*); and

defining a set of tags (*i.e. "custom tag library"*) for calling the methods (*i.e. "The custom tag library may include tags for indicating to the functional component to perform one or more of the following functions: substituting attribute values, substituting element values, iteration, testing the validity of an expression, or creating a document object model instance", col. 4, lines 13-17*).

18. Does not explicitly disclose wherein individual Interfaces match individual Use-Patterns.

19. However Egli teaches wherein individual Interfaces (i.e. ***"Album and Element"***) match individual Use-Patterns (i.e. ***"In the media functional area, objects representing digital media such as digital photographs, audio, and video implement an interface named Element. Objects that represent containers for Elements, such as Album, implement an interface named Container"***, paragraph [0094], lines 3-10, ***-Album matches the use pattern for organizing a photo graph, video, or audio album and Element matches use pattern for updating photo- i.e. "The <updatePhotoCmd> tag inspects the request for a parameter, named key, determines that its value matches the value of the tag's key attribute, determines that the HTTP request type is a POST, sets the photo object properties from the request parameters, and calls methods in the underlying media management software layer to save the modified Element object"***, paragraph [0156], lines 1-8).

20. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the system of Santiago with the teachings of object implementation from Egli because this feature would have provided a mechanism to map tags to the base abstract classes or interfaces implemented by the business objects, as was implemented in the Media functional area (***paragraph [0093], lines 6-8 of Egli***).

21. **As to claim 2**, Santiago teaches wherein a Data Object implementing the set of interfaces comprises one or more data items with values (*i.e. "Specifically, the DOM is a platform-independent interface allowing dynamic access to the content, structure, and style of documents. The DOM provides a hierarchical naming structure that permits all objects in a page (or document), including images, forms, properties, and objects, to be accessible to scripting languages", col. 3, lines 6-13*).

22. **As to claim 3**, Santiago teaches wherein the set of Use-Patterns comprises one or more patterns from a group consisting of:

a pattern of accessing and displaying the string value of a data item (*i.e. "the functional component to perform one or more of the following functions: substituting attribute values, substituting element values", col. 4, lines 14-15*);

a pattern of iterating through a collection of Data Objects (*i.e. "the functional component to perform one or more of the following functions: ... iteration", col. 4, lines 14-16*); and

a pattern of determining whether data items in a collection of Data Objects contain a specific value (*i.e. "the functional component to perform one or more of the following functions: substituting attribute values, substituting element values, iteration, testing the validity of an expression", col. 4, lines 14-17*).

23. **As to claim 4**, Santiago teaches wherein the set of Interfaces (i.e. *“XPath instructions”, “The presentation JSPs, created by the page author, access domain data or resources, represented as DOM document instances 420, using XPath instructions”, col. 5, lines 55-57*) includes:

an Interface for accessing the string value of a data item (i.e. *“performing one or more functions on data identified by the XPath instruction, such as substituting values”, col. 5, lines 16-18, “the functional component to perform one or more of the following functions: substituting attribute values, substituting element values”, col. 4, lines 14-15*);

an Interface for iterating through and getting the size of a collection of Data Objects (i.e. *“performing one or more functions on data identified by the XPath instruction, such as substituting values, iterating an expression”, col. 5, lines 16-18*); and

an Interface for determining whether the data items in a collection of Data Objects contain a specific value (i.e. *“performing one or more functions on data identified by the XPath instruction, such as substituting values, iterating an expression, testing the validity of an expression or creating an instance of a DOM document”, col. 5, lines 16-19*).

24. **As to claim 5**, Santiago teaches wherein the set of tags calls the methods in the set of Interfaces to access data of diverse data sources in dynamic content generation (i.e. *“The custom tag library may include one or more tags for performing one or*

more functions on data identified by the XPath instruction, such as substituting values, iterating an expression, testing the validity of an expression or creating an instance of a DOM document”, col. 5, lines 17-19, “The presentation JSPs, created by the page author, access domain data or resources, represented as DOM document instances 420, using XPath instructions”, col. 5, lines 55-57).

25. **As to claim 7**, Santiago teaches wherein the set of tags comprises one or more tags from a group consisting of tags that perform the following functions:

displaying the value of a data item (i.e. **“Tag: *getvalue*: The *getvalue* tag obtains the result of an XPath expression. For example, if the instruction includes the language “mytag:getvalue select=“/ORDER/SHIPTO/NAME” the tag handler will obtain the value stored at the location represented by the XPath expression, or in this case, the value found at /ORDER/SHIPTO/NAME”, col. 6, lines 39-44);**

iterating through a collection of Data Objects, getting the size of a collection (i.e. **Tag: *iterate*: The *iterate* tag allows iteration over an XPath expression that results in multiple nodes, and is used in conjunction with the *getvalue* tag, described below. For example, if a DOM included several <ITEM>. . . <ITEM>; elements, an instruction including mytag:iterate select “/ITEM” with a further evaluation, such as *getvalue*, would cause the tag handler to go through each of the several ITEM elements and obtain the desired values”, col. 6, lines 30-48, -value could**

represent number of elements included in XPath expression which represents size of collection);

evaluating tag body based on the result of testing the value of a data item (*i.e.* ***“Tag: ifdef: The ifdef tag tests if the XPath expression is valid and maps to a defined node. If the test returns true, then the body of the tag is evaluated. For example, the instruction “mytag:ifdef select=“/ORDER/SHIPTO”” would determine if a node exists for this location. If true, then the XPath is evaluated”***, col. 6, lines 46-51);

evaluating the tag body based on the result of testing the size of a collection (*i.e.* ***–viewOrder.jsp example, col. 13 and 14, lines 16-25, –using the three tags getvalue, ifdef, and iterate–***, “The above code uses three tags from the XPath tag library: getvalue, ifdef, and iterate. The getvalue tag applies the XPath expression specified in the select, on the Order DOM document instance and substitutes the result. The conditional ifdef tag evaluates its body content only if the XPath expressions specified in its select are valid. iterate, an iteration tag, parses its body contents for each iteration. In this case, the select attribute specifies a node set to be retrieved which is then iterated over. Note that the getvalue tag, when used within the iterate tag, specifies a relative XPath expression in its select attribute”, col. 15, lines 1-7 and col. 16, lines 1-4); or

evaluating tag body based on the result of testing the values of a data item in a collection of Data Objects (*i.e.* ***–viewOrder.jsp example, col. 13 and 14, lines 16-25,*** “The above code uses three tags from the XPath tag library: getvalue, ifdef, and

*iterate. The **getvalue** tag applies the XPath expression specified in the **select**, on the **Order DOM** document instance and substitutes the result. The conditional **ifdef** tag evaluates its body content only if the XPath expressions specified in its **select** are valid”, col. 15, lines 1-6).*

26. **As to claim 8**, Santiago teaches wherein the set of tags are used with a server having a platform capable of generating a dynamic web page from a mixture of HTML code with the tags (i.e. *“FIG. 3 illustrates a portion of an exemplary server 120, consistent with present invention. Server 120 includes JSP module 310, tag handler 320, custom tag library 330, and Web server 340. JSP module 310 executes instructions including a graphical user interface utilizing JSP code”, col. 5, lines 30-35, “The following example illustrates HTML code, similar to that written by a page author, for accessing data from the DOM instance by the JSP”, col. 12, lines 1-3).*

27. **As to claim 9**, Santiago teaches whereby a need for programming codes for dynamic content generation in a script file of the web page is eliminated (i.e. *“FIG. 4 is a block diagram used to explain how the above described components interact with each other. XPath tag library 400 provides a framework within which dynamic content, represented as a DOM document, can be manipulated and inserted into a JSP 410. This simplifies the JSP code and eliminates the need for the page author to use Java in order to interact with the DOM document and the model component”, col. 5, lines 47-55).*

28. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Santiago (U.S. Patent 7,096,455 B2) in view of Egli (2003/0084120 A1), as applied to claim 1 above, and further in view of Little et al. (hereinafter Little) (U.S. Publication No. 2002/0091990 A1).

29. As to claim 6, Santiago as modified by Egli does not explicitly disclose adapting the set of Interfaces with an Adapter object to access a source of data.

30. However Little teaches adapting the set of Interfaces with an Adapter object (i.e. –creating adapter class) to access a source of data (i.e. –to access m3 server- "The Distribution Adapter pattern may be applied to a local class in the application to create an Adapter class that will be exposed to M3 clients. The design pattern "Adapter" is described in several contemporary pattern books and is a term known to one skilled in art. An Adapter converts the interface of a class into another interface that clients expect. Application of the Adapter pattern does not necessarily imply the behavior of the new client interface. The resulting Adapter interface may have exactly the same behavior as the original, or it may be different", paragraphs [0244], lines 1-5 and paragraph [0245], lines 1-6, "M3 Server--An executable program or application that implements distributed CORBA objects for use by client programs", paragraph [0046], lines 1-2).

31. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have further modified the system of Santiago as modified by Egli with the teachings of adapter from Little because this feature would have further provided a mechanism to convert the interface of a class into another interface that clients expect (*paragraph [0245], lines 1-2 of Little*).

32. Claims 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Santiago (U.S. Patent 7,096,455 B2) in view of Little et al. (hereinafter Little) (U.S. Publication No. 2002/0091990 A1).

33. As to claim 10, Santiago teaches the invention substantially as claimed including accessing content in a plurality of data sources comprising:

providing a set of tags (*i.e. "custom tag library"*), each tag capable of invoking at least one method (*i.e. "function"*), *"The custom tag library may include tags for indicating to the functional component to perform one or more of the following functions: substituting attribute values, substituting element values, iteration, testing the validity of an expression, or creating a document object model instance"*, col. 4, lines 13-17) defined in a first set of Interfaces (*i.e. "DOM document instances, 420, Figure 4"*, *"Specifically, the DOM is a platform-independent interface allowing dynamic access to the content, structure, and style of documents"*, col. 3, lines 6-8, *"XML provides for a Document Object Model (DOM) for defining a standard way to represent diverse data sources"*, col. 3, lines 4-6) implemented by a first Data Object (*i.e. "Document Object Model (DOM)"*)

representing a first data source (i.e. *"Domain Data, 430, Figure 4, "FIG. 4 is a block diagram used to explain how the above described components interact with each other. XPath tag library 400 provides a framework within which dynamic content, represented as a DOM document, can be manipulated and inserted into a JSP 410. This simplifies the JSP code and eliminates the need for the page author to use Java in order to interact with the DOM document and the model component. The presentation JSPs, created by the page author, access domain data or resources, represented as DOM document instances 420, using XPath instructions. The result includes the desired data 430"*, col. 5, lines 47-58);

whereby the set of tags is usable to invoke methods (i.e. *"function", "The custom tag library may include tags for indicating to the functional component to perform one or more of the following functions: substituting attribute values, substituting element values, iteration, testing the validity of an expression, or creating a document object model instance"*, col. 4, lines 13-17) defined in the second interface (i.e. *another one of the Document Object Model instances*) to access data in the second Data Object (i.e. *—another one of the diverse data sources—"DOM document instances, 420, Figure 4", "Specifically, the DOM is a platform-independent interface allowing dynamic access to the content, structure, and style of documents"*, col. 3, lines 6-8, *"XML provides for a Document Object Model (DOM) for defining a standard way to represent diverse data sources"*, col. 3, lines 4-6).

34. Santiago does not explicitly disclose providing an Adapter object which adapts a second set of Interfaces of a second Data Object representing a second data source to the first set of Interfaces; and

wherein the Adapter removes mismatches between the second set Interfaces and the tags.

35. However Little teaches providing an Adapter object (*i.e. –creating adapter class*) which adapts a second set of Interfaces of a second Data Object (*i.e. interfaces of another distributed object*) representing a second data source (*i.e. another database server*) to the first set of Interfaces (*i.e. –to access another database server from the m3 client- "The Distribution Adapter pattern may be applied to a local class in the application to create an Adapter class that will be exposed to M3 clients. The design pattern "Adapter" is described in several contemporary pattern books and is a term known to one skilled in art. An Adapter converts the interface of a class into another interface that clients expect. Application of the Adapter pattern does not necessarily imply the behavior of the new client interface. The resulting Adapter interface may have exactly the same behavior as the original, or it may be different", paragraphs [0244], lines 1-5 and paragraph [0245], lines 1-6, "M3 Server--An executable program or application that implements distributed CORBA objects for use by client programs", paragraph [0046], lines 1-2, "In an M3 application, it is necessary to determine which objects are distributed and visible to clients versus which objects are local language*

objects. The Distribution Adapter pattern allows the designer a means to formalize this distinction. Distributed objects need to have a well-defined interface, be made known to the M3 framework, and be appropriate for distribution”, paragraph [0252], lines 1-7); and

wherein the Adapter (*i.e. new adapter class created by applying pattern*) removes mismatches between the second set Interfaces (*i.e. “source class”*) and the tags (*i.e. “new class” written in JAVA™ which represents the client and the adapter pattern is used for the situation when you want to create a reusable class that cooperates with other classes that have incompatible interfaces”, paragraph [0245], lines 6-7, and paragraph [0248], lines 1-3 “,-tags represent reusable interface, “The Expert System menu includes the ability to apply the Distribution Adapter pattern to a specific class in the Logical View. This pattern has the following effect: 1. Creates a new Class for the selected class named DA<class name>; 2. Populates the new Class with copies of all of the operations in the source class to serve as a starting point for the Distribution Adapter interface. 3. Marks the new Class with properties to ensure that it is included in the generated IDL, Java, or C++ implementations. 4. Creates a Distributes association 280 from the new class to the source class as shown in FIG. 26. 5. If the source class is included in a Server, mark the new DA class to be included in that server”, paragraph [0254], lines 1-3, paragraph [0255], lines 1-2, paragraph [0256], lines 1-3, paragraph [0257], lines 1-3, paragraph [02585], lines 1-2, and paragraph [0259], lines 1-2).*

36. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the system of Santiago with the teachings of an adapter from Little because this feature would have provided a mechanism to convert the interface of a class into another interface that clients expect (**paragraph [0245], lines 1-2 of Little**).

37. **As to claim 11**, Santiago teaches identifying (*i.e. disclosing*) a set of Use-Patterns (*i.e. actions performed by functions, “performing one or more functions on data identified by the XPath instruction, such as substituting values, iterating an expression, testing the validity of an expression or creating an instance of a DOM document”*, col. 5, lines 16-19, *-actions disclosed are substituting values, iterating an expression, testing the validity of an expression or creating an instance of a DOM document*); wherein the first set of Interfaces defines methods (*i.e. “XPath instructions”*) according to the set of Use-Patterns (*i.e. –identified functions- “the functional component to perform one or more of the following functions: substituting attribute values, substituting element values, iteration, testing the validity of an expression, or creating a document object model instance”*, col. 4, lines 13-17, *“The presentation JSPs, created by the page author, access domain data or resources, represented as DOM document instances 420, using XPath instructions*, col. 5, lines 55-57).

38. **As to claim 12**, Santiago teaches wherein the set of Use-Patterns comprises one or more Use Patterns from the group consisting of:

a pattern of accessing and displaying the string value of a data item (*i.e. “the functional component to perform one or more of the following functions: substituting attribute values, substituting element values”, col. 4, lines 14-15*);

a pattern of iterating through a collection of Data Objects (*i.e. “the functional component to perform one or more of the following functions: ... iteration”, col. 4, lines 14-16*); and

a pattern of determining whether the data items in a collection of Data Objects contain a specific value(*i.e. “the functional component to perform one or more of the following functions: substituting attribute values, substituting element values, iteration, testing the validity of an expression”, col. 4, lines 14-17*).

39. **As to claim 13**, this claim is rejected for the same reasons as claims 10 and 11, since claim 13 recites the same or equivalent invention, see the rejection to claims 10 and 11 above.

40. **As to claim 14**, teaches wherein the ways in which data is accessed includes identifying a data source (*i.e. “Domain Data, 430, Figure 4*) from which the data is accessed (*i.e. “FIG. 4 is a block diagram used to explain how the above described components interact with each other. XPath tag library 400 provides a framework within which dynamic content, represented as a DOM document, can be*

manipulated and inserted into a JSP 410. This simplifies the JSP code and eliminates the need for the page author to use Java in order to interact with the DOM document and the model component. The presentation JSPs, created by the page author, access domain data or resources, represented as DOM document instances 420, using XPath instructions. The result includes the desired data 430", col. 5, lines 47-58) and a connection method thereto (i.e. "In this context, the process associated with client 100 is called a browser, which establishes a connection with the process associated with server 104, called a Web server. The browser presents information to the user", col. 1, lines 31-35).

41. **As to claim 15**, Santiago teaches whereby proliferation of tags is prevented (i.e. *"specifically, methods and systems consistent with the present invention provide a custom tag library that facilitates the use of XPath in JSPs. The custom tag library may include one or more tags for performing one or more functions on data identified by the XPath instruction, such as substituting values, iterating an expression, testing the validity of an expression or creating an instance of a DOM document. A page author may use these tags from the custom tag library when defining a user interface using JSPs. The page author may have information about a DOM document as provided by the programmer and thus may use the tags to interact with the DOM document. In this way, the page author requires minimal knowledge of the functional portion of the application. Further, the use*

of the tags permits straightforward access to data”, col. 5, lines 7-28, -tag library is predefined number of tags for page author to use).

42. **As to claim 16**, Santiago teaches whereby the set of tags is sufficient for representing all the ways in which a tag user would want to access and use data (*i.e.* ***“The custom tag library may include one or more tags for performing one or more functions on data identified by the XPath instruction, such as substituting values, iterating an expression, testing the validity of an expression or creating an instance of a DOM document”, col. 5, lines 17-19).***

43. **As to claim 17**, Santiago teaches wherein the set of tags is provided for retrieving and displaying dynamic content in a web page (*i.e.* ***“FIG. 3 illustrates a portion of an exemplary server 120, consistent with present invention. Server 120 includes JSP module 310, tag handler 320, custom tag library 330, and Web server 340. JSP module 310 executes instructions including a graphical user interface utilizing JSP code”, col. 5, lines 30-35, “The following example illustrates HTML code, similar to that written by a page author, for accessing data from the DOM instance by the JSP”, col. 12, lines 1-3, “XPath tag library 400 provides a framework within which dynamic content, represented as a DOM document, can be manipulated and inserted into a JSP 41”, col. 5, lines 48-51).***

Conclusion

44. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KimbleAnn Verdi whose telephone number is (571)270-1654. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST..

45. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

46. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LeChi Truong/
Primary Examiner, Art Unit 2194

KV

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